

	Type	Hits	Search Text	DBs	Time Stamp
1	BRS	299	protoporphyrinogen adj oxidase	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:09
2	BRS	15	(protoporphyrinogen adj oxidase) and FAD	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:06
3	BRS	224	(protoporphyrinogen adj oxidase) and herbicide	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:06
4	BRS	19	((protoporphyrinogen adj oxidase) and herbicide) and (binding adj site)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:08
5	BRS	299	protoporphyrinogen adj oxidase	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:09
6	BRS	1	(protoporphyrinogen adj oxidase) and Heard.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:10
7	BRS	6	(protoporphyrinogen adj oxidase) and protox.ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/19 13:11

09/498,719

	Comments	Error Definition	Errors
1			0
2			0
3			0
4			0
5			0
6			0
7			0

(FILE 'HOME' ENTERED AT 10:23:34 ON 19 MAR 2004)

FILE 'AGRICOLA, BIOSIS, CAPLUS, EMBASE' ENTERED AT 10:23:53 ON 19 MAR 2004

L1 1243 S PROTOPORPHYRINOGEN (S) OXIDASE
L2 42 S L1 AND FAD
L3 22 DUP REM L2 (20 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 10:27:06 ON 19 MAR 2004

FILE 'AGRICOLA, BIOSIS, CAPLUS, EMBASE' ENTERED AT 10:37:45 ON 19 MAR 2004

L4 7 S PPO AND FAD
L5 4 DUP REM L4 (3 DUPLICATES REMOVED)
L6 4 S PROTOX AND FAD
L7 2 DUP REM L6 (2 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 10:39:33 ON 19 MAR 2004

=> d 1-

YOU HAVE REQUESTED DATA FROM 22 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:23277 BIOSIS
DN PREV200400026011
TI Structure of the yeast *Saccharomyces cerevisiae* **protoporphyrinogen oxidase**: Homology modeling and biochemical studies of the active site topology.
AU Benevant, A. [Reprint Author]; Colloc'h, N.; Camadro, J. M. [Reprint Author]
CS Laboratoire d'Ingenierie des Proteines et Controle Metabolique, Institut Jacques Monod, CNRS, Universites Paris 6 et 7, Paris, France
SO Molecular & Cellular Proteomics, (September 2003) Vol. 2, No. 9, pp. 958. print.
Meeting Info.: HUPO (Human Proteomics Organisation) 2nd Annual and IUBMB (International Union of Biochemistry and Molecular Biology) XIX World Congress. Montreal, Quebec, Canada. October 08-11, 2003. American Society for Biochemistry and Molecular Biology Inc.
ISSN: 1535-9476 (ISSN print).
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 31 Dec 2003
Last Updated on STN: 31 Dec 2003

L3 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:861169 CAPLUS
DN 138:164474
TI Cloning and expression of a *Porphyromonas gingivalis* gene for **protoporphyrinogen oxidase** by complementation of a hemG mutant of *Escherichia coli*
AU Kusaba, A.; Ansai, T.; Akifusa, S.; Nakahigashi, K.; Taketani, S.; Inokuchi, H.; Takehara, T.
CS Department of Preventive Dentistry, Kyushu Dental College, Kokurakita-ku, Kitakyushu, 803-8580, Japan
SO Oral Microbiology and Immunology (2002), 17(5), 290-295
CODEN: OMIMEE; ISSN: 0902-0055
PB Blackwell Munksgaard
DT Journal
LA English
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2001:245084 BIOSIS
DN PREV200100245084
TI Purification, characterization of *Bacillus subtilis* **protoporphyrinogen oxidase** and pre-equilibrium behavior of the oxidation of **protoporphyrinogen IX**.
AU Han, Oksoo [Reprint author]
CS Department of Genetic Engineering and Biotechnology Research Institute, Chonnam National University, 300 Yonbong-dong Buk-gu, Kwangju, 500-757, South Korea
SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A875. print.
Meeting Info.: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001. Orlando, Florida, USA. March 31-April 04, 2001.
CODEN: FAJOEC. ISSN: 0892-6638.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 23 May 2001

Last Updated on STN: 19 Feb 2002

L3 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:186698 CAPLUS
DN 134:337476
TI Purification and characterization of *Bacillus subtilis*
protoporphyrinogen oxidase and pre-equilibrium behavior
during oxidation of **protoporphyrinogen IX**
AU Jeong, Eunju; Han, Oksoo
CS Department of Genetic Engineering and Biotechnology Research Institute,
Chonnam National University, Kwangju, 500-757, S. Korea
SO Journal of Biochemistry and Molecular Biology (2001), 34(1), 39-42
CODEN: JBMBE5; ISSN: 1225-8687
PB Springer-Verlag Singapore Pte. Ltd.
DT Journal
LA English
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 1
AN 2000:376196 BIOSIS
DN PREV2000000376196
TI Purification and properties of **protoporphyrinogen**
oxidase from spinach chloroplasts.
AU Watanabe, Naohide; Che, Fang-Sik [Reprint author]; Terashima, Kenji;
Takayama, Seiji; Yoshida, Shigeo; Isogai, Akira
CS Graduate School of Biological Sciences, Nara Institute of Science and
Technology, 8915-5, Takayama Ikoma, Nara, 630-0101, Japan
SO Plant and Cell Physiology, (July, 2000) Vol. 41, No. 7, pp. 889-892.
print.
CODEN: PCPHA5. ISSN: 0032-0781.
DT Article
LA English
ED Entered STN: 6 Sep 2000
Last Updated on STN: 8 Jan 2002

L3 ANSWER 6 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AN 2000:95211 BIOSIS
DN PREV200000095211
TI New sequence motifs in flavoproteins: Evidence for common ancestry and
tools to predict structure.
AU Vallon, Olivier [Reprint author]
CS Institut de Biologie Physico-Chimique, UPR 9072 CNRS, 13 Rue Pierre et
Marie Curie, F-75005, Paris, France
SO Proteins, (Jan. 1, 2000) Vol. 38, No. 1, pp. 95-114. print.
CODEN: PSFGEY. ISSN: 0887-3585.
DT Article
LA English
ED Entered STN: 15 Mar 2000
Last Updated on STN: 3 Jan 2002

L3 ANSWER 7 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
AN 1998:317463 BIOSIS
DN PREV199800317463
TI Identification of an **FAD** superfamily containing
protoporphyrinogen oxidases, monoamine **oxidases**
and phytoene desaturase: Expression and characterization of phytoene
desaturase of *Myxococcus xanthus*.
AU Dailey, Tamara A.; Dailey, Harry A. [Reprint author]
CS Dep. Biochem. Mol. Biol., A 222 Life Sciences Build., Univ. Georgia,
Athens, GA 30602-7229, USA

SO Journal of Biological Chemistry, (May 29, 1998) Vol. 273, No. 22, pp. 13658-13662. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DT Article
LA English
ED Entered STN: 22 Jul 1998
Last Updated on STN: 22 Jul 1998

L3 ANSWER 8 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
AN 1998:486289 BIOSIS
DN PREV199800486289
TI Stability of recombinant yeast **protoporphyrinogen oxidase**: Effects of diphenyl ether-type herbicides and diphenyleneiodonium.
AU Arnould, Sylvain; Takahashi, Masayuki; Camadro, Jean-Michel [Reprint author]
CS Lab. Biochim. Porphyrines, Dep. Microbiol., Inst. Jacques-Monod, UMR 7592 CNRS-Univ. Paris 6 Pierre et Marie Curie-Univ. Paris 7 Denis-Diderot, 2 Pl. Jussieu, F-75251 Paris Cedex 05, France
SO Biochemistry, (Sept. 15, 1998) Vol. 37, No. 37, pp. 12818-12828. print.
CODEN: BICHAW. ISSN: 0006-2960.

DT Article
LA English
ED Entered STN: 5 Nov 1998
Last Updated on STN: 5 Nov 1998

L3 ANSWER 9 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
DUPLICATE 5
AN 1999:22382 AGRICOLA
DN IND21972233
TI The domain structure of **protoporphyrinogen oxidase**, the molecular target of diphenyl ether-type herbicides.
AU Arnould, S.; Camadro, J.M.
CS Universite Paris, Paris, France.
AV DNAL (500 N21P)
SO Proceedings of the National Academy of Sciences of the United States of America, Sept 1, 1998. Vol. 95, No. 18. p. 10553-10558
Publisher: Washington, D.C. : National Academy of Sciences,
CODEN: PNASA6; ISSN: 0027-8424

NTE Includes references
CY District of Columbia; United States
DT Article; Conference
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L3 ANSWER 10 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 6
AN 1998:300938 BIOSIS
DN PREV199800300938
TI Human proporphyrinogen oxidase: Relation between the herbicide binding site and the flavin cofactor.
AU Birchfield, Norman B.; Latli, Bachir; Casida, John E. [Reprint author]
CS Environ. Chem. and Toxicol. Lab., Dep. Environ. Sci. Policy and Manage., Univ. Calif., Davis, CA 94720-3112, USA
SO Biochemistry, (May 12, 1998) Vol. 37, No. 19, pp. 6905-6910. print.
CODEN: BICHAW. ISSN: 0006-2960.

DT Article
LA English
ED Entered STN: 15 Jul 1998
Last Updated on STN: 13 Aug 1998

L3 ANSWER 11 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 7
AN 1998:494865 BIOSIS
DN PREV199800494865
TI Purification of and kinetic studies on a cloned **protoporphyrinogen
oxidase** from the aerobic bacterium *Bacillus subtilis*.
AU Corrigall, A. V. [Reprint author]; Siziba, K. B.; Maneli, M. H.; Shephard,
E. G.; Ziman, M.; Dailey, T. A.; Dailey, H. A.; Kirsch, R. E.; Meissner,
P. N.
CS Lennox Eales Porphyria Lab., MRC/UCT Liver Res. Centre, Dep. Med., Univ.
Cape Town Med. Sch., Observatory 7925, South Africa
SO Archives of Biochemistry and Biophysics, (Oct. 15, 1998) Vol. 358, No. 2,
pp. 251-256. print.
CODEN: ABBIA4. ISSN: 0003-9861.
DT Article
LA English
ED Entered STN: 18 Nov 1998
Last Updated on STN: 10 May 1999

L3 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:628261 CAPLUS
DN 127:304562
TI Enzymes of heme biosynthesis
AU Dailey, Harry A.
CS Department of Microbiology, Department of Biochemistry and Molecular
Biology, The University of Georgia, Athens, GA, 30602-7229, USA
SO JBIC, Journal of Biological Inorganic Chemistry (1997), 2(4), 411-417
CODEN: JJBCFA; ISSN: 0949-8257
PB Springer
DT Journal; General Review
LA English
RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1997:350054 BIOSIS
DN PREV199799649257
TI Isolated *Bacillus subtilis* HemY has coproporphyrinogen III to
coproporphyrin III oxidase activity.
AU Hansson, Mats [Reprint author]; Gustafsson, Mattias C. U.; Kannangara, C.
Gamini; Hederstedt, Lars
CS Carlsberg Lab., Dep. Physiol., Gamle Carlsberg Vej 10, DK-2500 Copenhagen,
Valby, Denmark
SO Biochimica et Biophysica Acta, (1997) Vol. 1340, No. 1, pp. 97-104.
CODEN: BBACAQ. ISSN: 0006-3002.
DT Article
LA English
ED Entered STN: 11 Aug 1997
Last Updated on STN: 4 Sep 1997

L3 ANSWER 14 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 8
AN 1997:156826 BIOSIS
DN PREV199799456029
TI Characteristics of human **protoporphyrinogen oxidase** in
controls and variegate porphyrias.
AU Dailey, Harry A. [Reprint author]; Dailey, Tamara A.
CS Dep. Microbiol., Univ. Georgia, Athens, GA 30602-2605, USA
SO Cellular and Molecular Biology (Noisy-Le-Grand), (1997) Vol. 43, No. 1,
pp. 67-73.
DT Article
LA English
ED Entered STN: 15 Apr 1997
Last Updated on STN: 2 May 1997

L3 ANSWER 15 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 9
 AN 1996:242560 BIOSIS
 DN PREV199698790689
 TI **Protoporphyrinogen oxidase** of *Myxococcus xanthus*:
 Expression, purification, and characterization of the cloned enzyme.
 AU Dailey, Harry A. [Reprint author]; Dailey, Tamara A.
 CS Dep. Microbiol., Univ. Georgia, Athens, GA 30602-2605, USA
 SO Journal of Biological Chemistry, (1996) Vol. 271, No. 15, pp. 8714-8718.
 CODEN: JBCHA3. ISSN: 0021-9258.
 DT Article
 LA English
 OS Genbank-L43967; Genbank-M73709; Genbank-M97208; Genbank-U25114;
 Genbank-U26446; Genbank-U38704
 ED Entered STN: 28 May 1996
 Last Updated on STN: 11 Jul 1996

L3 ANSWER 16 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 10
 AN 1996:76509 BIOSIS
 DN PREV199698648644
 TI Human **protoporphyrinogen oxidase**: Expression,
 purification, and characterization of the cloned enzyme.
 AU Dailey, Tamara A.; Dailey, Harry A. [Reprint author]
 CS Dep. Microbiol., Univ. Ga., Athens, GA 30602-2605, USA
 SO Protein Science, (1996) Vol. 5, No. 1, pp. 98-105.
 ISSN: 0961-8368.
 DT Article
 LA English
 OS Genbank-L27429; Genbank-M97208; Genbank-U25114; Genbank-U26446
 ED Entered STN: 27 Feb 1996
 Last Updated on STN: 10 Jun 1997

L3 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1994:695704 CAPLUS
 DN 121:295704
 TI Purification and properties of **protoporphyrinogen
 oxidase** from the yeast *Saccharomyces cerevisiae*: mitochondrial
 location and evidence for a precursor form of the protein
 AU Camadro, Jean-Michel; Thome, Françoise; Brouillet, Nicole; Labbe, Pierre
 CS Lab. Biochimie Porphyrines, Dep. Microbiologie Institut Jacques Monod,
 Paris, F-75251, Fr.
 SO Journal of Biological Chemistry (1994), 269(51), 32085-91
 CODEN: JBCHA3; ISSN: 0021-9258
 PB American Society for Biochemistry and Molecular Biology
 DT Journal
 LA English

L3 ANSWER 18 OF 22 AGRICOLA Compiled and distributed by the National
 Agricultural Library of the Department of Agriculture of the United States
 of America. It contains copyrighted materials. All rights reserved.
 (2004) on STN
 AN 96:30323 AGRICOLA
 DN IND20513485
 TI Characterization of plant and yeast **protoporphyrinogen
 oxidase**: molecular target of diphenyl ether type herbicides.
 AU Camadro, J.M.; Matringe, M.; Brouillet, N.; Thome, F.; Labbe, P.
 CS Universite Paris, Paris, France.
 AV DNAL (QD1.A45)
 SO ACS symposium series, 1994. No. 559. p. 81-90
 Publisher: Washington, D.C. : American Chemical Society, 1974-
 CODEN: ACSMC8; ISSN: 0097-6156
 NTE In the series analytic: Porphyrin pesticides: chemistry, toxicology and

pharmaceutical applications / edited by S.O. Duke and C.A. Reheiz.
Includes references

CY District of Columbia; United States
DT Article; Law
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L3 ANSWER 19 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 11
AN 1988:198533 BIOSIS
DN PREV198885099879; BA85:99879
TI MOUSE **PROTOPORPHYRINOGEN OXIDASE** KINETIC PARAMETERS
AND DEMONSTRATION OF INHIBITION BY BILIRUBIN.
AU FERREIRA G C [Reprint author]; DAILEY H A
CS DEP MICROBIOL, UNIV GA, ATHENS, GA 30602, USA
SO Biochemical Journal, (1988) Vol. 250, No. 2, pp. 597-604.
ISSN: 0264-6021.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 21 Apr 1988
Last Updated on STN: 21 Apr 1988

L3 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:71100 CAPLUS
DN 108:71100
TI Purification and properties of **protoporphyrinogen
oxidase** from an anaerobic bacterium, *Desulfovibrio gigas*
AU Klemm, Dwight J.; Barton, Larry L.
CS Dep. Biol., Univ. New Mexico, Albuquerque, NM, 87131, USA
SO Journal of Bacteriology (1987), 169(11), 5209-15
CODEN: JOBAAJ; ISSN: 0021-9193
DT Journal
LA English

L3 ANSWER 21 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 12
AN 1987:441567 BIOSIS
DN PREV198784097405; BA84:97405
TI PURIFICATION OF BOVINE **PROTOPORPHYRINOGEN OXIDASE**
IMMUNOLOGICAL CROSS-REACTIVITY AND STRUCTURAL RELATIONSHIP FERROCHELATASE.
AU SIEPKER L J [Reprint author]; FORD M; DE KOCK R; KRAMER S
CS DEP HAMAETOL, SCH PATHOL, UNIV WITWATERSRAND , PO BOX 1038, JOHANNESBURG
2000, SOUTH AFRICA
SO Biochimica et Biophysica Acta, (1987) Vol. 913, No. 3, pp. 349-358.
CODEN: BBACAQ. ISSN: 0006-3002.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 24 Oct 1987
Last Updated on STN: 24 Oct 1987

L3 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1964:24464 CAPLUS
DN 60:24464
OREF 60:4382a-c
TI The enzymic conversion of coproporphyrinogen III into protoporphyrin IX
AU Porra, R. J.; Falk, J. E.
CS Div. Plant Ind., C.S.I.R.O., Canberra, Australia
SO Biochemical Journal (1964), 90(1), 69-75
CODEN: BIJOAK; ISSN: 0264-6021
DT Journal
LA Unavailable

=> FIL STNGUIDE
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
42.06	42.27

FULL ESTIMATED COST

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 12, 2004 (20040312/UP).

=> d his

(FILE 'HOME' ENTERED AT 10:23:34 ON 19 MAR 2004)

FILE 'AGRICOLA, BIOSIS, CAPLUS, EMBASE' ENTERED AT 10:23:53 ON 19 MAR 2004
L1 1243 S PROTOPORPHYRINOGEN (S) OXIDASE
L2 42 S L1 AND FAD
L3 22 DUP REM L2 (20 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 10:27:06 ON 19 MAR 2004